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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,600	12/28/2001	Himanshu Pokharna	42390.P12382	2675

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EXAMINER

EDWARDS, ANTHONY Q

ART UNIT PAPER NUMBER

2835

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/040,600

Applicant(s)

POKHARNA ET AL.

Examiner

Anthony Q. Edwards

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aw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 27-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27, 28, 30-33, 35-39 and 41-43 is/are rejected.
- 7) ☒ Claim(s) 29, 34 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 27, 28, 31, 32, 36-39 and 41-43 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,275,945 to Tsuji et al. Referring to claim 27, Tsuji et al. disclose a computer cooler 2 comprising a cold plate 31 to come into contact a portable computer system 1 to transfer heat away from the portable computer system; a cooling system to transfer heat from the cold plate to the environment surrounding the computer cooler when the portable computer system is in contact the cold plate; a first connector 21 to mate to an external connector 16 of the portable computer system when the portable computer system is in contact with the cold plate (see Figures 1, 2 and the corresponding specification). Tsuji et al. also disclose a controller 52 to receive a command from the portable computer indicating the desired degree of cooling, and to control the cooling system to ensure that the desired degree of cooling indicated by the portable computer is achieved while the portable computer is in contact with the cold plate. See Figure 9 and the corresponding specification, wherein controller (52) receives a command from the portable computer (1) in which the command is the “temperature detection signal” (see col. 8, lines 8-16). This signal “indicates the desired degree of cooling” by outputting a specific signal corresponding to a predetermined reference value, and these values

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are then used by the cooling system to ensure the desired degree of cooling by increasing or decreasing wind flow in the fans (50).

Referring to claims 28, 33 and 39, Tsuji et al. disclose a computer cooler and method, wherein the controller (52) monitors at least one component (i.e., motor 51) of the cooling system to aid in controlling the degree of cooling achieved by the cooling system, and wherein controlling is based on the transferring of heat from the cold plate on input received from monitoring the fan speed of the cooling system (see Figure 9 and column 6, lines 60-66).

Referring to claim 31, Tsuji et al. disclose a computer cooler, further comprising a second connector 20a/20b that replicates the external connector of the portable computer system, allowing an external device to be attached to the computer cooler through the second connector and thereby receive signals from the external connector of the portable computer system through the first and second connectors. See Figures 4, 6A and column 3, lines 45-52.

Referring to claims 32 and 38, Tsuji et al. disclose an apparatus and method of using an apparatus, comprising a portable computer system 1 with a heat spreader 30 to transfer heat away from at least one component 15 within the portable computer system; a cold plate 31 provided by a computer cooler 2 to come into contact with the heat spreader to transfer heat from the heat spreader of the portable computer; a cooling system within the computer cooler to transfer heat away from the cold plate to the environment surrounding the computer cooler when the heat spreader of the portable computer system is in contact with the cold plate (see Figures 1, 2 and the corresponding specification). Tsuji et al. also disclose a first connector 21 provided by the computer cooler to mate to an external connector 16 of the portable computer system when the portable computer system is in contact with the cold plate; and a controller 52 within the

computer cooler to a command (i.e., a temperature detection signal) from the portable computer indicating the desired degree of cooling and to control the cooling system to ensure that the desired degree of cooling indicated by the portable computer is achieved while the heat spreader of the portable computer is in contact with the cold plate. See Figure 9 and see col. 8, lines 8-16.

Referring to claims 36 and 41, Tsuji et al. an apparatus and method of using an apparatus, further comprising a second connector 20a/20b provided by the computer cooler 2 that replicates the external connector of the portable computer system, allowing an external device to be attached to the computer cooler through the second connector and thereby receive signals from the external connector of the portable computer system through the first and second connectors. See Figures 4, 6A and column 3, lines 45-52.

Referring to claims 37 and 43, Figure 7 of Tsuji et al. shows an apparatus and method of using an apparatus, further comprising a component within the portable computer system having a feature (i.e., the full power mode) that is disabled at a time when the heat spreader of the portable computer system is not in contact with the cold plate, and that is enabled at a time when the heat spreader of the portable computer is in contact with the cold plate. See col. 10, lines 47-67.

Referring to claim 42, Tsuji et al. disclose a method, wherein placing a portable computer system 1 in contact with the cold plate 31 of a computer cooler 2 comprises placing a heat spreader 30 of the portable computer system in contact with the cold plate of the computer cooler. See Figure 2 and the corresponding specification.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al. in view of U.S. Patent No. 6,453,378 to Olson et al. Tsuji et al. disclose the claimed cooler and apparatus comprising the same, except for the cooling system having a compressor, an evaporator, a condenser and a refrigerant. Olson et al. disclose a portable computer (110) with docking station (112), utilizing refrigerative cooling, provided by a compressor (816) and refrigerant filled coil (814). Although Olson et al. does not expressly disclose an evaporator and condenser, such elements are well known and conventional in refrigerative cooling systems. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cooling apparatus and method of using the same of Tsuji et al. to include refrigerative cooling, as taught by Olson et al., since this type of cooling does not usually require a high fan speed, which causes unwanted noise while using the computer apparatus.

***Response to Arguments***

Applicant's arguments filed December 31, 2003 have been fully considered but they are not persuasive. Regarding claims 27, 32 and 38, applicant is directed to the Examiner's comments above.

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Regarding claim 28, the applicants' argument is moot in view the amendments to the claim. Applicant is directed to the Examiner's comments above for the rejection based on the newly amended claim.

Regarding claims 37 and 43, the applicant is again directed the Examiner's comments provided above for clarification.

***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter: claims 29, 34, and 40 are allowable since it would not have been obvious to have the controller of the cooling system monitor the temperature of the cold plate to aid in controlling the degree of cooling. These features, in combination with the rest of the elements or steps, are not taught or suggested by the prior art references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

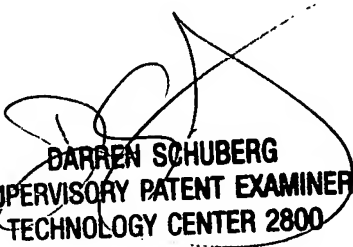
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 8, 2004

aqe

  
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